LAr Test Stand Transverse Diffusion Measurement & Big Dewar Plans

Discussion in LAr meeting, 11/04/2014 Craig, Xin, Yichen, Jyoti

Outline

- Transverse Diffusion Measurement To be worked on
- Big Dewar Plans

Transverse Diffusion Measurement on Existing test stand

- Electronics System Design
 - Using MicroBooNE ASIC Contact Hucheng/Gianluigi
 - Electronics feedthrough requirements Contact Hucheng/Gianluigi
 - Anode design (wire pitch, channels etc) Contact Graham
 - Instrumentation Div. will help in fabrication and designing (requires designer's time)
 - Readout System Design VME Crate Help from Wei/Lindsey
- · LAr purification + Regeneration System Design Contact Ross for design ? Engineer ?
- Drift cell (like Thomas's System) From Instrumentation Div.
- · Heating Photocathode Sapphire window/Need some design
- Distance between Grid and Anode Should be decreased to reduce systematics affects?

Big Dewar Plans

- Setup a meeting with Berry Norris from Fermilab?
 - Get it designed from fermilab engineer and then pass it over here?
- Need Engineering Support
- Jim/Steve want some kind of operational manual/plan/P&ID document for Big Dewar